

REMARKS/ARGUMENTS

Claims 1-20 are pending in the present application. The Examiner rejected claims 1-3, 7-10, 14 and 15-17 under 35 U.S.C. §102(b) as being anticipated by Yeager et al. (U.S. Patent No. 5,950,190). Claims 4-6, 11-13 and 18-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yeager in view of Clark (U.S. Patent No. 6,354,244).

Rejection Under 35 U.S.C. §102

In rejecting claims 1, 8 and 15, the Examiner stated:

Yeager teaches a method for dynamically changing attributes in an embedded-SQL application, the method comprising the step of:

- (a) providing an option (a DESCRIBE SELECT LIST) (col. 21, line 67) within a standard SQL statement for specifying one or more attributes (the SELECT DESCRIPTOR is processed to obtain the different column names and attributes) (e.g., data type, width, etc.) for each column) (col. 22, lines 11-13) of at least a declared cursor (the cursor is the OPENed at step 188 to allocate an area of memory for the dynamic SQL query) (col. 21, lines 65-66); and
- (b) processing the standard SQL statement to include the specific one or more attributes in at least the declared cursor (the SELECT DESCRIPTOR is processed to obtain the different column names and attribute ...) (col. 22, lines 11-22).

Regarding on claims 2, 9 and 16, Yeager teaches the method recited in claim 1, wherein the option providing step (a) providing an ATTRIBUTES option (the SELECT DESCRIPTOR is processed to obtain different column names and attributes) (the query is parsed and the query is generated with dynamically attributes (col. 22, lines 11-34).

Regarding on claims 3, 10 and 17, Yeager teaches the method recited in claim 2, wherein option with a PREPARE statement (the column names and attributes are selected based on the SELECT STATEMENT DESCRIPTOR)(col. 22, lines 11-21).

Applicant respectfully disagrees.

The present invention dynamically changes attributes in an embedded-SQL application by providing an option within a standard SQL statement for specifying one or more attributes of at least a declared cursor, and by processing the standard SQL statement to include the one or more

attributes specified in the at least declared cursor. (See independent claims 1, 8, and 15).

Applicant recites more particularly that the option is provided as an ATTRIBUTES option within a PREPARE SQL statement. (See dependent claims 2, 3, 9, 10, 16, and 17). In this manner, attributes of a cursor may be dynamically changed without requiring declaration of a new cursor or the introduction of a new SQL statement. Applicant demonstrates this ability in the SQL examples in the specification from page 8, line 18 to page 10, line 9.

Applicant respectfully submits that Yeager fails to teach or suggest the ability to provide attributes of a declared cursor in a standard SQL statement and/or the ability to process the standard SQL statement to include the attributes in the declared cursor, as recited in claims 1, 8 and 15. Yeager is directed to a graphical user interface that allows the user to query and edit the contents of a relational database management system and to alter the design or structure of the underlying relational database tables. (Col. 1, lines 14-19). The graphical user interface recognizes modifications to the structure of the database tables and regenerates the graphical windows to accommodate such modifications.

Thus, according to Yeager, the new dynamic graphical user interface allows database users to search and edit the contents of the database without requiring the users to be familiar with relatively complex structured query languages. Moreover, database users are allowed to modify the structure or data dictionary of the relational database without the use of a structured query language. Because the dynamic graphical user interface recognizes changes to the data dictionary and modifies itself to incorporate those changes, modifications to the structure of the relational database will not render the graphical user interface of the present invention inoperative. (Col. 4, lines 11-29).

Applicant respectfully submits that Yeager fails to teach, show, or suggest the present invention, which addresses aspects of specifying *attributes of a declared cursor* to dynamically change the attributes. Yeager makes no reference regarding *cursor attributes* and thus offers no teaching or suggestion as to how attributes of a declared cursor could or would be specified and processed. Thus, Applicant respectfully submits that Yeager fails to teach or suggest providing an option within a standard SQL statement for specifying one or more attributes of at least a declared cursor and processing the standard SQL statement to include the specified one or more attributes in the at least declared cursor, as recited in independent claims 1, 8, and 15.

Moreover, Yeager fails to teach, show, or suggest an ATTRIBUTES option provided within a PREPARE SQL statement, as recited in dependent claims 2, 3, 9, 10, 16, and 17. In the Office Action, the Examiner indicates that Yeager teaches all of these features beginning at column 21, line 59 to column 22, line 34. Applicant respectfully disagrees. That portion of Yeager describes a particular step that is performed when the GUI recognizes that a change has been made to the structure of the RDBMS. The step (step 154 of FIG. 13 and described in FIG. 15) goes to determining the column name(s) and the attributes for each column in a selected table. The cited portion reads:

Once a SELECT statement is generated at step 182, the SELECT statement is PREPARED for parsing at step 184. As noted in the glossary section above, the parsing of a SQL statement essentially checks the statement for syntactic and semantic validity. Next, a CURSOR or memory pointer is DECLARED from the PREPARED SELECT statement at step 186. The CURSOR is then OPENED at step 188 to allocate an area of memory for the dynamic SQL query. Next, at step 190, a DESCRIBE SELECT LIST is issued to initialize the Oracle descriptor to hold the descriptions of the list of columns generated by the SELECT statement in step 182. Furthermore, because a wildcard ("*") was preferably used to SELECT all the columns within a selected table or tables in step 182, descriptions are initialized for each of the table's columns, including the column name, data type, width, scale, etc. These table descriptions, known as SELECT DESCRIPTORS,

are stored in a SQL descriptor area where they can be accessed by the DGUI of the present invention for column information.

Next, at step 192, the SELECT DESCRIPTOR is processed to obtain the different column names and attributes (e.g., data type, width, etc.) for each column. However, because the contents stored within the database tables (i.e., the row information) are not needed at this time, only the SELECT DESCRIPTOR is processed at step 192 and a FETCH is never performed on the SELECT statement generated in step 182. In step 194, the column information obtained from processing the SELECT DESCRIPTOR in step 192 is stored within a new internal data structure called DataDictionaryInterface for later use in building the different windows shown in FIGS. 4-12.

Thus, the steps 182-194 within the loop 180 operate to build the internal data structure DataDictionaryInterface generating a SELECT statement to build a SELECT LIST and then DESCRIBing that SELECT LIST and processing the resulting SELECT DESCRIPTOR to store the column name and attributes for each table without completing the SELECT statement and FETCHing the database contents. Once the DataDictionaryInterface data structure is built with the column names and attributes for each of the tables selected in step 170 (FIG. 14), step 196 in FIG. 15 returns the program flow to the main sequence 150 (FIG. 13) at step 156.

Yeager, column 21, line 59 to column 22, line 34.

The recited invention concerns how attributes of a declared cursor are dynamically changed through an option provided in a standard SQL statement. Nothing in the cited portion, which provides a process for describing a selected table, teaches or suggests providing an option within a standard SQL statement for specifying one or more attributes of at least a declared cursor and processing the standard SQL statement to include the specified one or more attributes in the at least declared cursor, as recited in independent claims 1, 8, and 15, or an ATTRIBUTES option provided within a PREPARE SQL statement, as recited in dependent claims 2, 3, 9, 10, 16, and 17.

In view of the foregoing, Applicant respectfully submits that claims 1-3, 8-10, and 15-17 are allowable over Yeager. Claims 7 and 14 depend directly or indirectly on an independent claim, thus incorporating at least the features of an independent claim while adding further features. Therefore, these claims are respectfully submitted as allowable for at least those reasons presented hereinabove with respect to claims 1, 8, and 15.

Rejection Under 35 U.S.C. §103

The Examiner rejected claims 4-6, 11-13, and 18-20 as being unpatentable over Yeager in view of Clark (U.S. Patent No. 6,354,244 B1). Applicant notes that the cited U.S. Patent Number appears to be erroneous because it corresponds to a patent granted to Larry Green, entitled “Modular Garden Accessory System” and not to a patent issued to Clark. Applicant is unable to provide an analysis of Clark.

Nonetheless, even if Clark teaches what the Examiner states it teaches, which Applicant cannot confirm, Applicant respectfully submits that Clark fails to remedy the deficiencies of Yeager. That is, Clark does not teach or suggest providing an option within a standard SQL statement for specifying one or more attributes of at least a declared cursor and processing the standard SQL statement to include the specified one or more attributes in the at least declared cursor, as recited in independent claims 1, 8, and 15.

Claims 4-6, 11-13, and 18-20 depend directly or indirectly on an independent claim, thus incorporating at least the features of an independent claim while adding further features. Because neither Yeager nor Clark, singularly or in combination, teach or suggest the present invention as recited in the independent claims, they cannot teach or suggest claims 4-6, 11-13,

and 18-20. Accordingly, Applicant respectfully submits that claims 4-6, 11-13, and 18-20 are allowable over the cited references.

Conclusion

In view of the foregoing, Applicant submits that claims 1-20 are allowable over the cited references. Applicants respectfully request reconsideration and allowance of the claims as now presented.

Applicant's attorney believes that this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,
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Date

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